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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,484	01/21/2004	Gregory R. Zimmer	024445-110	9807

21839 7590 06/22/2005

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EXAMINER

HAMILTON, ISAAC N

ART UNIT PAPER NUMBER

3724

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/760,484	Applicant(s) ZIMMER, GREGORY R.	
	Examiner Isaac N. Hamilton	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/21/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-10, in the reply filed on 06/07/05 is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer et al (5,537,905), hereafter Zimmer. Zimmer discloses shank portion 2; shank side surfaces 3a, 3b; thickness of shank portion is juxtaposed side surfaces 3a, 3b; V-shaped cutting edge portion surfaces 5a, 5b; cutting edge 6; notches 8; intermediate portion/intermediate portion surfaces 10a, 10b; shaved and ground surfaces in column 4, lines 37-46; shank portion has a lower hardness at a surface than at the center in column 4, lines 48-54.

Zimmer discloses the claimed invention except for the thickness of the shank portion is from 0.178 to 2.13 mm, the hardness is between 280 and 450 HV, the cutting edge hardness is between 480 to 720 HV, the shank portion has a thickness of 0.71 mm and a hardness of 380 HV, the cutting edge portion has a hardness of 640 HV and is bendable to 150 degrees at a radius of 0.35 mm, the shank portion has a thickness of 1.05 mm, the shank portion has a thickness between 1.42 and 2.13 mm. It would have been obvious to one of ordinary skill in the art to provide the elements mentioned above for the purpose of maximizing cutting efficiency for

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different materials, such as, plastic, paper, rubber, wood, cardboard, and metal. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Such a modification would have involved a mere change in the size or characteristic of a component. A change in size, bendability and hardness is generally recognized as being within the level of ordinary skill in the art.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer in view of Reijnders (6,464,121). Zimmer discloses everything as noted above, but does not disclose distances between at least two pairs of succeeding notches are different. Reijnders teaches distances between at least two pairs of succeeding notches are different in figure 7. It would have been obvious to provide distances between at least two pairs of succeeding notches are different in Zimmer as taught by Reijnders in order to avoid cutting elements on the surface area of the workpiece.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hardy, Jr. is cited for similar structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Hamilton whose telephone number is 571-272-4509. The examiner can normally be reached on Monday through Friday between 8am and 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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June 17, 2005

as

Allan N. Shoap
Supervisory Patent Examiner
Group 3700